

### **AMENDMENTS TO THE CLAIMS**

The following listing of the claims replaces all prior claim listings.

#### **Listing of Claims:**

Claims 1-35. (Canceled)

Claim 36. (New): A process for cleaving a polypeptide comprising cleaving the polypeptide with an *E. coli* OmpT protease,

wherein the polypeptide comprises a cleavage site that is a peptide bond between a P1 position and a P1' position,

wherein the P1 position is arginine or lysine;

wherein the P1' position is an amino acid other than aspartic acid, glutamic acid or proline; and

wherein two or three consecutive basic amino acids are situated in the amino acid sequence from a P10 position to a P3 position.

Claim 37. (New): The process according to claim 36,

wherein the polypeptide is a fusion protein comprising a protecting peptide and a target peptide,

wherein the C-terminus of the protecting peptide is the P1 position and the N-terminus of the target peptide is the P1' position,

wherein the fusion protein is produced by expressing a gene encoding the fusion protein in a host cell, and

wherein cleavage of the fusion protein liberates the target peptide.

Claim 38. (New): The process of claim 37, wherein the target peptide is composed of between 22 and 45 amino acid residues.

Claim 39. (New): The process of claim 38, wherein the target peptide is adrenocorticotrophic hormone (1-24), motilin or calcitonin precursor.

Claim 40. (New): The process of claim 37, wherein the host cell is *E. coli*.

Claim 41. (New): The process of claim 37, wherein the *E. coli* OmpT protease is produced by expressing a gene encoding the *E. coli* OmpT protease in said host cell.

Claim 42. (New): The process of claim 36, wherein, if a site which is not desired to be cleaved by the *E. coli* OmpT protease is present in the polypeptide, cleavage at said site is inhibited by situating an acidic amino acid at the P3 position.

Claim 43. (New): The process of claim 36, wherein three consecutive basic amino acids are situated between the P5 and P3 positions in the polypeptide.

Claim 44. (New): The process of claim 36, wherein the basic amino acids are arginine and/or lysine.

Claim 45. (New): The process of claim 44, wherein the basic amino acids are arginine.

Claim 46. (New): The process of claim 36, wherein the amino acid sequence from the P5 to P1 positions in the polypeptide is Arg-Arg-Arg-Ala-Arg (SEQ ID NO: 11).

Claim 47. (New): The process of claim 36, wherein the amino acid sequence from the P7 to P1 positions in the polypeptide is Asp-Ala-Arg-Arg-Arg-Ala-Arg (SEQ ID NO: 12).

Claim 48. (New): The process of claim 36, wherein the *E. coli* OmpT protease is an *E. coli* OmpT protease 97th amino acid variant, wherein the 97th amino acid from the N-terminus

of *E. coli* OmpT protease variant is alanine, leucine, phenylalanine, methionine, serine, threonine, cysteine, asparagine, glutamine, glutamic acid or histidine.

Claim 49. (New): A process for cleaving a polypeptide comprising cleaving the polypeptide with an *E. coli* OmpT protease 97th amino acid variant,

wherein the 97th amino acid from the N-terminus of the *E. coli* OmpT protease 97th amino acid variant is alanine, leucine, phenylalanine, methionine, serine, threonine, cysteine, asparagine, glutamine, glutamic acid or histidine,

wherein the polypeptide comprises a cleavage site that is a peptide bond between a P1 position and a P1' position, and

wherein the P1 position is arginine or lysine and the P1' position is an amino acid other than arginine or lysine.

Claim 50. (New): The process of claim 49, wherein the 97th amino acid from the N-terminus of the *E. coli* OmpT protease variant is leucine, methionine or histidine.

Claim 51. (New): The process of claim 49, wherein a single basic amino acid or two or three consecutive basic amino acids are situated in the amino acid sequence from a P10 position to a P3 position.

Claim 52. (New): The process of claim 51, wherein the basic amino acids are arginine and/or lysine.

Claim 53. (New): The process of claim 52, wherein the basic amino acids are arginine.

Claim 54. (New): The process of claim 49,

wherein the polypeptide is a fusion protein comprising a protecting peptide and a target peptide,

wherein the C-terminus of the protecting peptide is the P1 position and the N-terminus of the target peptide is the P1' position,

wherein the fusion protein is produced by expressing a gene encoding the fusion protein in a host cell, and

wherein cleavage of the fusion protein liberates the target peptide.

Claim 55. (New): The method of claim 54, wherein a single basic amino acid or two or three consecutive basic amino acids are situated in the amino acid sequence from a P10 position to a P3 position.

Claim 56. (New): The process of claim 54, wherein the *E. coli* OmpT protease 97th amino acid variant is produced by expressing a gene encoding the *E. coli* OmpT protease 97th amino acid variant in said host cell.

Claim 57. (New): The process of claim 49, wherein, if a site which is not desired to be cleaved by the *E. coli* OmpT protease 97th amino acid variant is present in the polypeptide, cleavage at said site is inhibited by situating an acidic amino acid at the P3 position.

Claim 58. (New): The process of claim 57, wherein the acidic amino acid is aspartic acid.

Claim 59. (New): The process of claim 49, wherein two or three consecutive basic amino acids are situated between P10 and P3 positions in the polypeptide.

Claim 60. (New): The process of claim 59, wherein three consecutive basic amino acids are situated between P5 and P3 positions in the polypeptide.

Claim 61. (New): The process of claim 49, wherein the amino acid sequence from P5 to P1 positions in the polypeptide is Arg-Arg-Arg-Ala-Arg (SEQ ID NO: 11).

Claim 62. (New): The process of claim 49, wherein the amino acid sequence from P7 to P1 positions in the polypeptide is Asp-Ala-Arg-Arg-Ala-Arg (SEQ ID NO: 12).

Claim 63. (New): The process of claim 49,  
wherein the P1' position is serine or alanine, and  
wherein the 97th amino acid of the *E. coli* OmpT protease 97th amino acid variant is leucine.

Claim 64. (New): The process of claim 49,  
wherein the P1' position is phenylalanine, alanine, serine, cysteine or tyrosine, and  
wherein the 97th amino acid of the *E. coli* OmpT protease 97th amino acid variant is methionine.

Claim 65. (New): The process of claim 49,  
wherein the P1' position is alanine, valine, isoleucine, methionine, serine, threonine, cysteine or asparagine, and  
wherein the 97th amino acid of the *E. coli* OmpT protease 97th amino acid variant is histidine.

Claim 66. (New): The process of claim 42, wherein the acidic amino acid is aspartic acid.

Claim 67. (New): The process of claim 54, wherein the target peptide is composed of between 22 and 45 amino acid residues.

Claim 68. (New): The process of claim 67, wherein the target peptide is adrenocorticotrophic hormone (1-24), motilin, or calcitonin precursor.